

# Cumulative Risk Assessment at EPA

## Briefing Paper

*This briefing paper is in response to language in the Consolidated Report: In lieu of the directive in House Report 117-83, the Agency is directed to brief the Committees on the Framework for Cumulative Risk Assessment and any planned reviews of the Framework. (pg 50)*

### KEY POINTS

- In 2003, EPA published the *Framework for Cumulative Risk Assessment* (<https://www.epa.gov/risk/framework-cumulative-risk-assessment>), which serves as a foundation for the development of guidelines as the Agency's experience with cumulative risk assessment grows. The *Framework for Cumulative Risk Assessment* is not being reviewed or updated.
- EPA's Risk Assessment Forum is developing a draft *Guidelines for Cumulative Risk Assessment Planning and Problem Formulation*, which builds on principles described in the 2003 framework and focuses on the first steps of risk assessment, planning and problem formulation. The draft guidelines are being prepared for public comment after completion of an external, independent peer review.
- EPA is in the process of developing a cumulative impacts framework, which is a separate effort from the development of cumulative risk assessment guidelines.

### BACKGROUND

#### Guidelines for Cumulative Risk Assessment Planning and Problem Formulation

EPA's 2003 *Framework for Cumulative Risk Assessment* was the first step in a long-term effort to develop cumulative risk assessment guidelines. The draft *Guidelines for Cumulative Risk Assessment Planning and Problem Formulation* builds on the framework providing further information for Agency risk assessors to consider at the initial steps of developing a cumulative risk assessment (i.e., Planning and Problem Formulation) and when such an assessment might be appropriate. When final, this guideline document is intended for use in conjunction with other EPA guidelines such as the *Guidelines and Supplementary Guidance for Assessment of Chemical Mixtures* and the *Framework for Human Health Risk Assessment to Inform Decision Making*.

The draft *Guidelines for Cumulative Risk Assessment Planning and Problem Formulation* will be released for public comment in 2023. The document will be posted on the EPA website and a Federal Register notice will also be published announcing the availability of the document for public comment. Public comments will be considered when finalizing the document.

#### Cumulative Risk Assessment versus Cumulative Impact Assessment

In recent years there has been an increased focus on cumulative impact assessment. Cumulative risk assessments present an analysis, characterization, and possible quantification of the combined risks to health and/or the environment from multiple agents and/or stressors. Cumulative impact assessments examine the totality of exposures to combinations of chemical and non-chemical stressors and their effects on health, well-being, and quality-of-life outcomes. While related, methods used in each approach may differ. Each of these assessment methods can provide useful information for decision makers. In September 2022, EPA published the final report *Cumulative Impacts Research: Recommendations for EPA's Office of Research and Development*. This report focuses on recommendations to enhance cumulative impact research that are applicable across the National Research Programs and includes recommendations for how ORD can provide management support to facilitate this complex research. A framework for cumulative impact assessment is also under development by EPA.